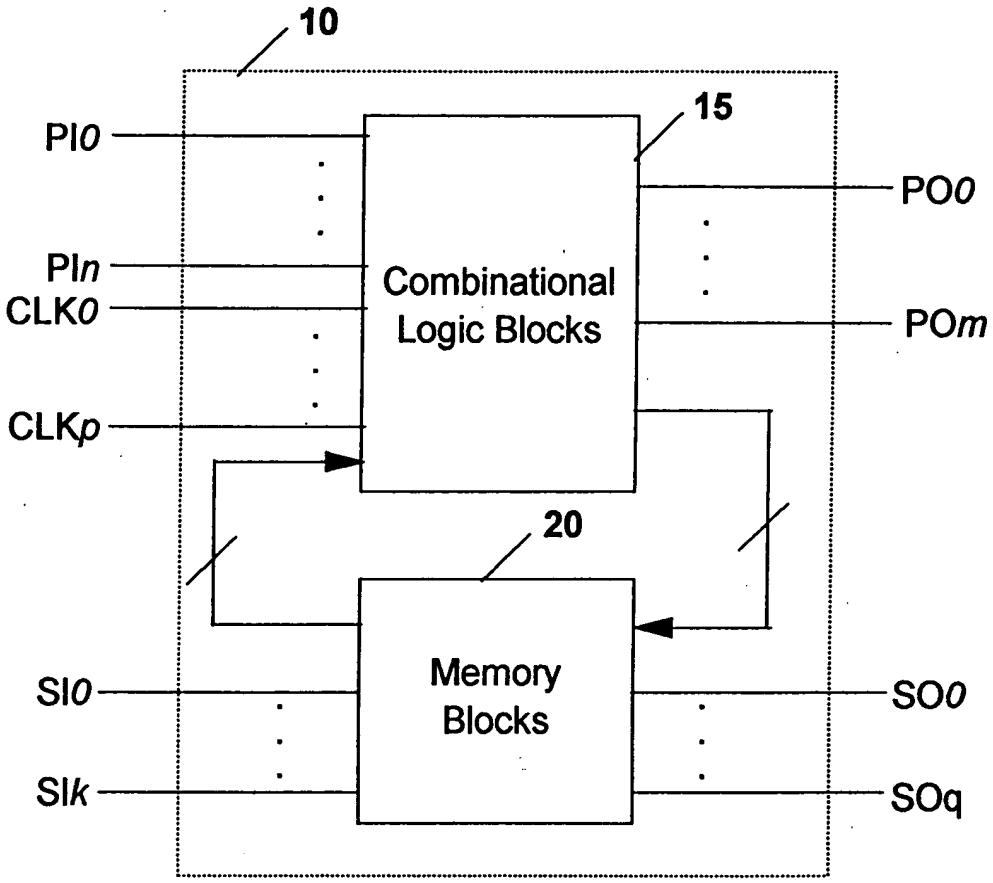


Figure 1.

09785554 051401

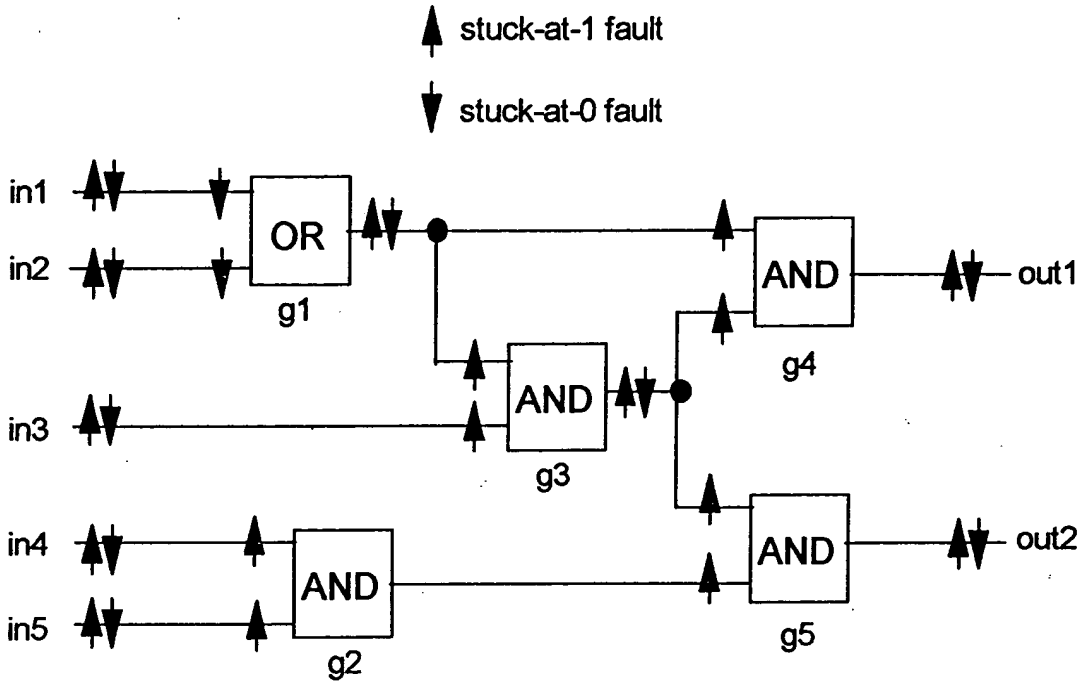


Figure 2.

09/965,564 - 06/17/04

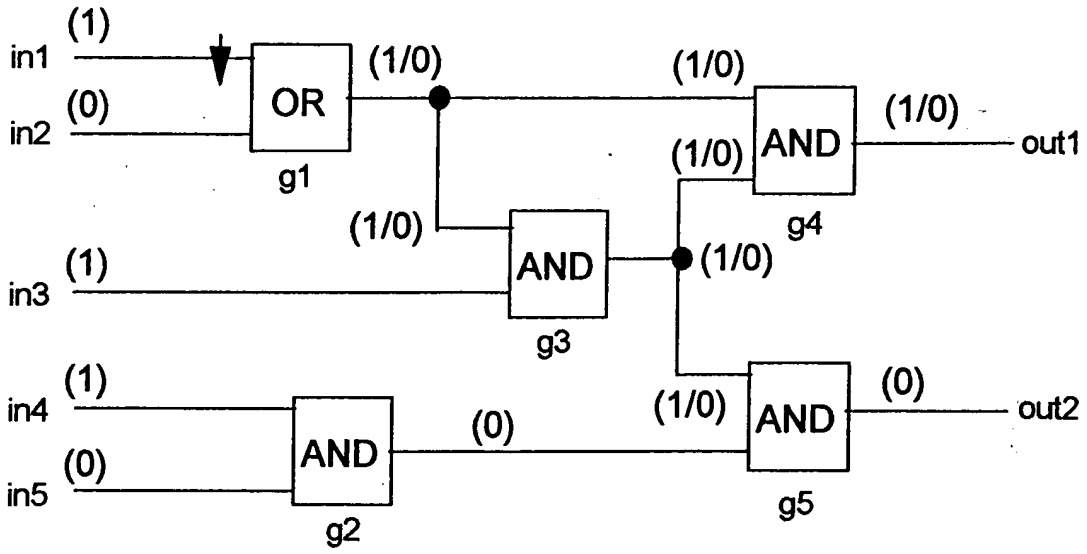


Figure 3.

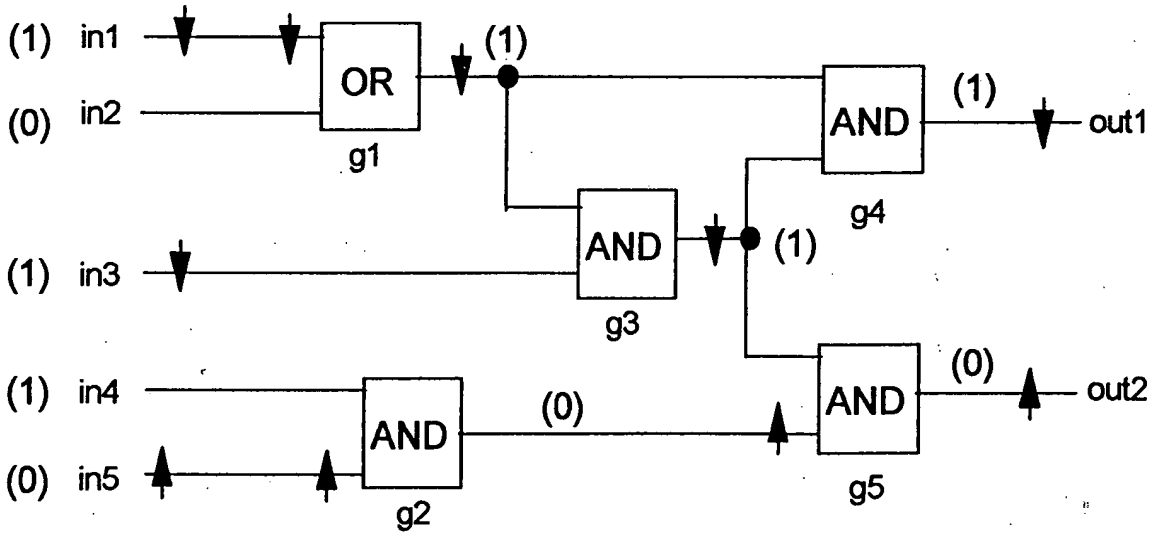


Figure 4.

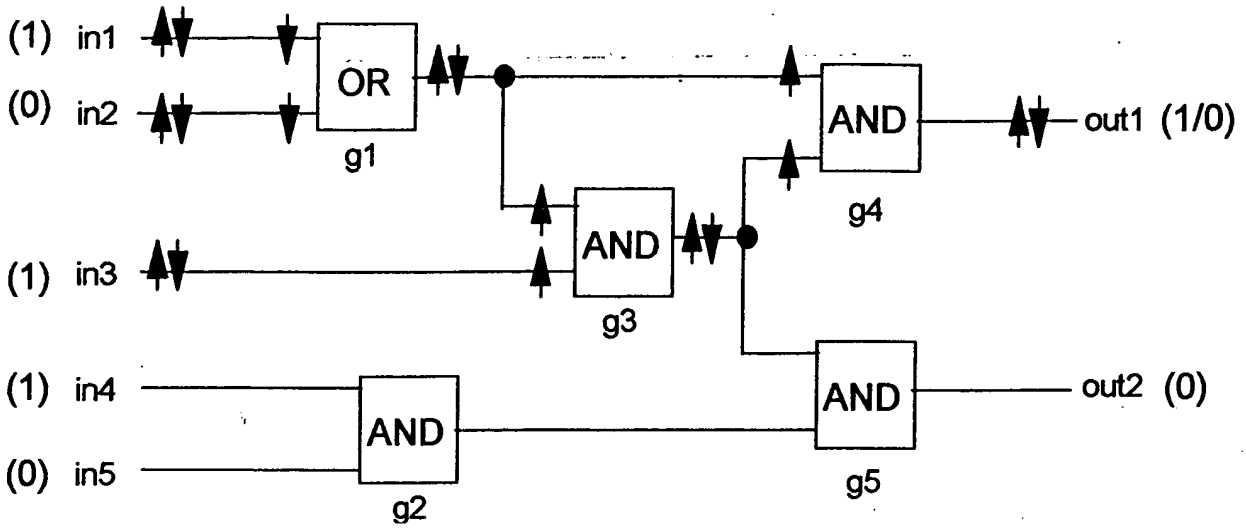


Figure 5

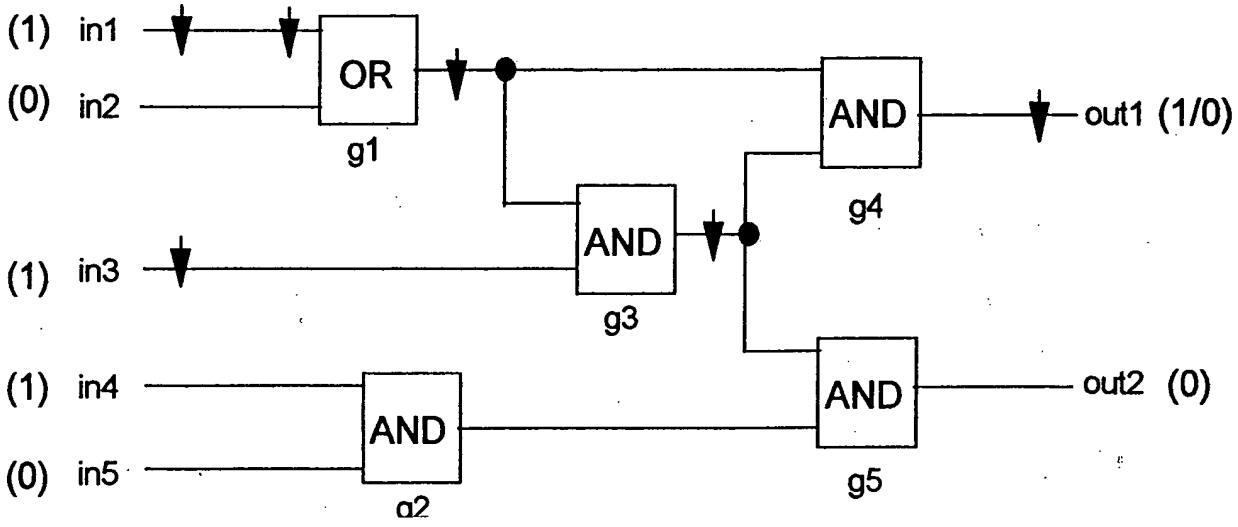


Figure 6.

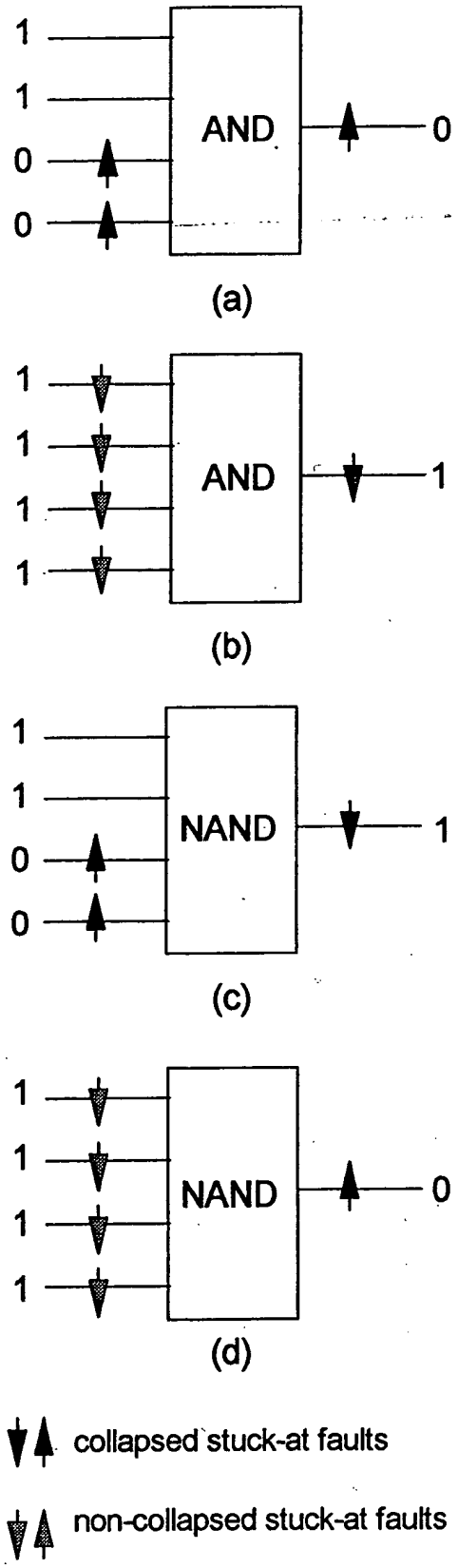


Figure 7.

09/765,547 - 05/10/04

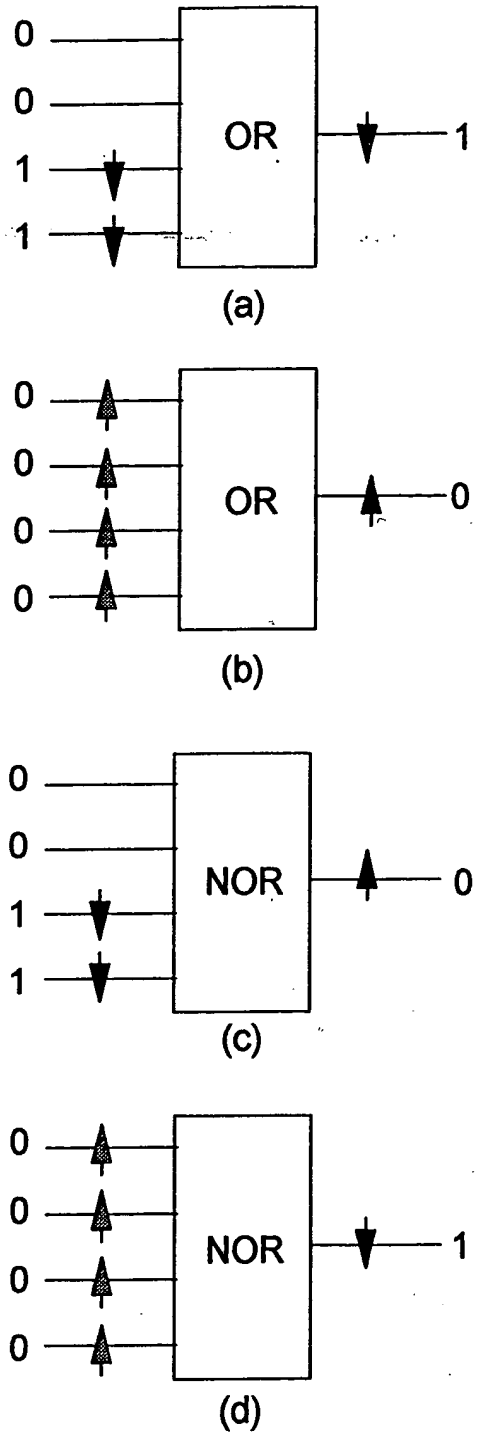
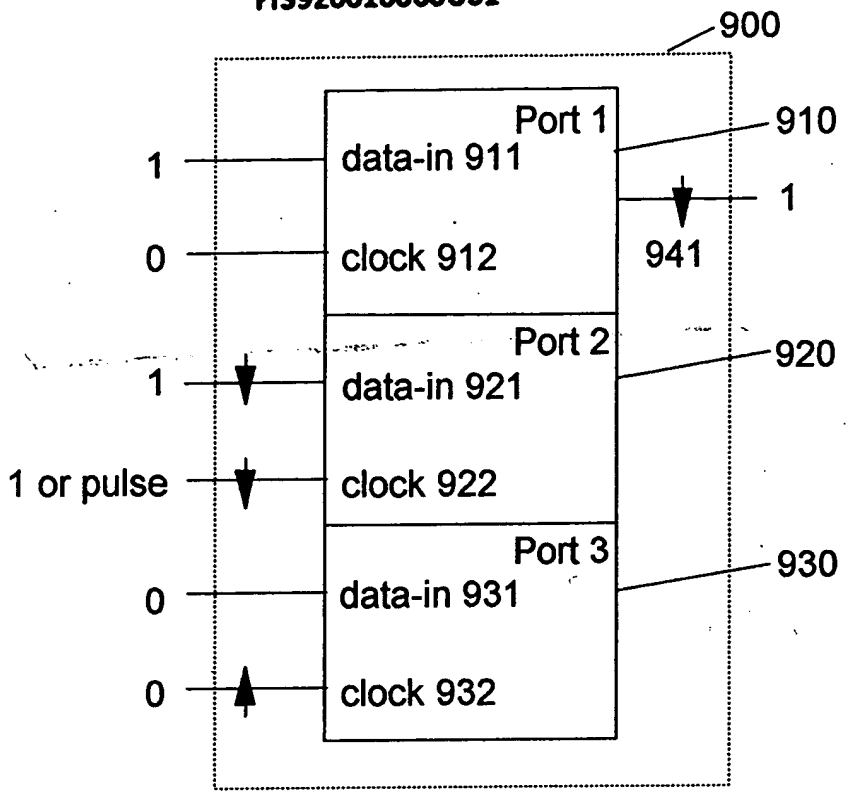
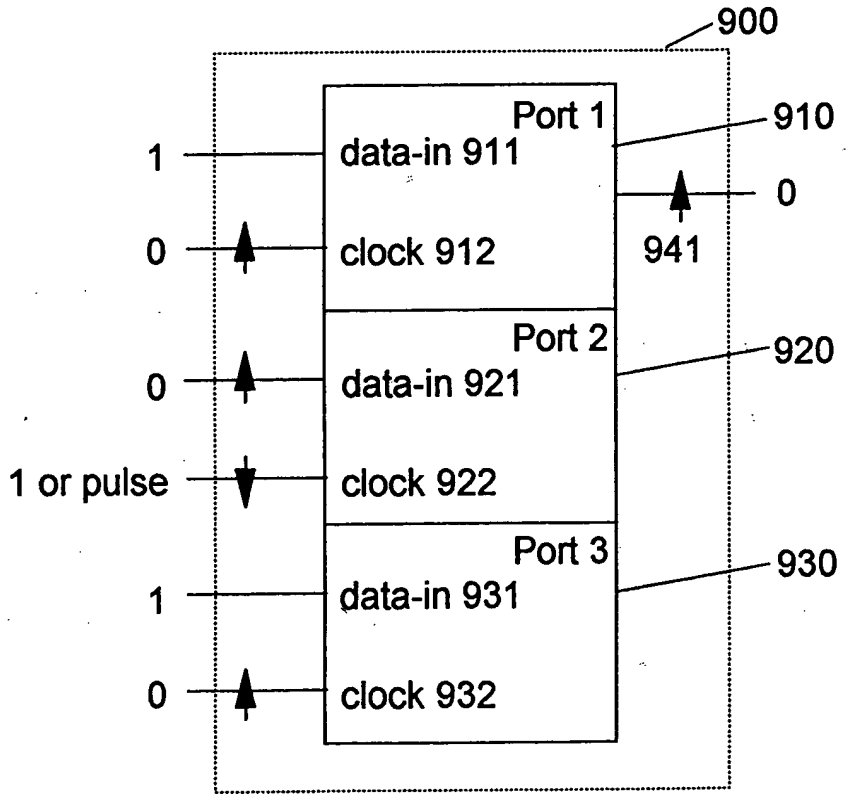

0
0
1
1
OR
1
(a)
0
0
0
0
OR
0
(b)
0
0
1
1
NOR
0
(c)
0
0
0
0
NOR
1
(d)
collapsed stuck-at faults
non-collapsed stuck-at faults

Figure 8.



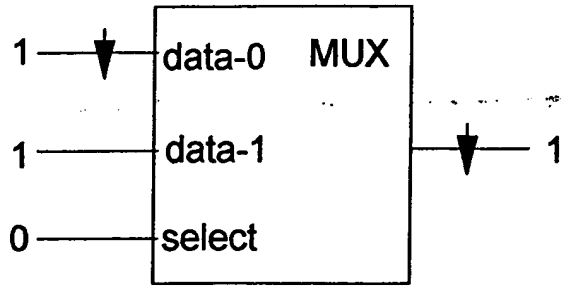
(a)



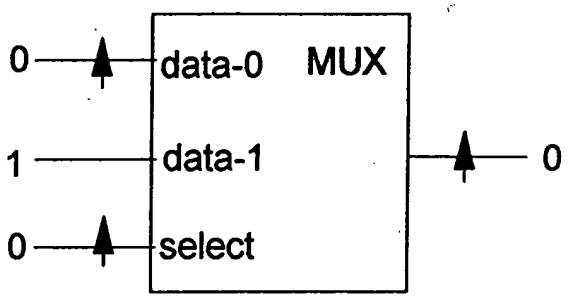
(b)

Figure 9.

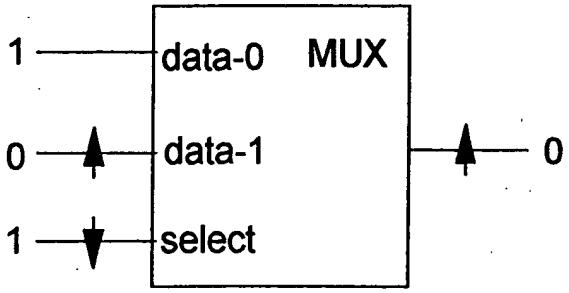
08/765,554 - 06/14/04



(a)

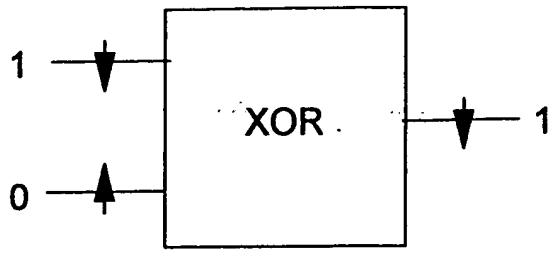


(b)

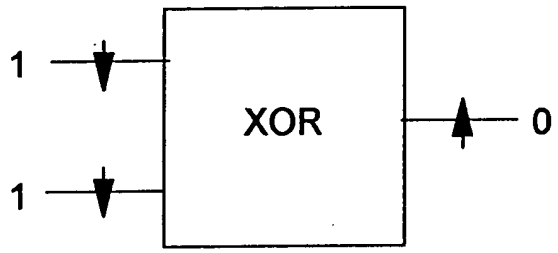


(c)

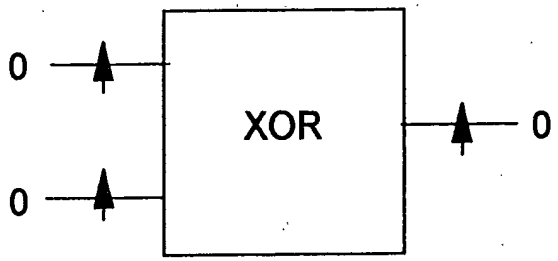
Figure 10.



(a)



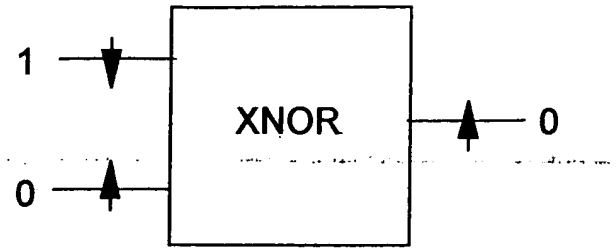
(b)



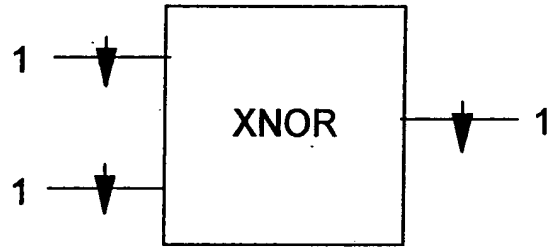
(c)

Figure 11.

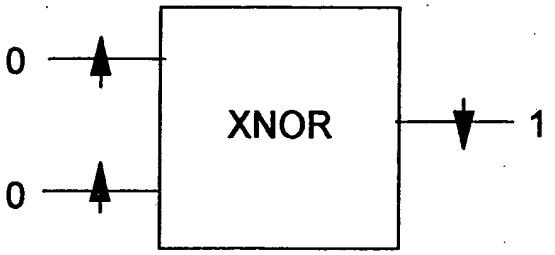
09/768,554 - 05/14/04



(a)



(b)



(c)

Figure 12.

09/965,564 - 06/14/05

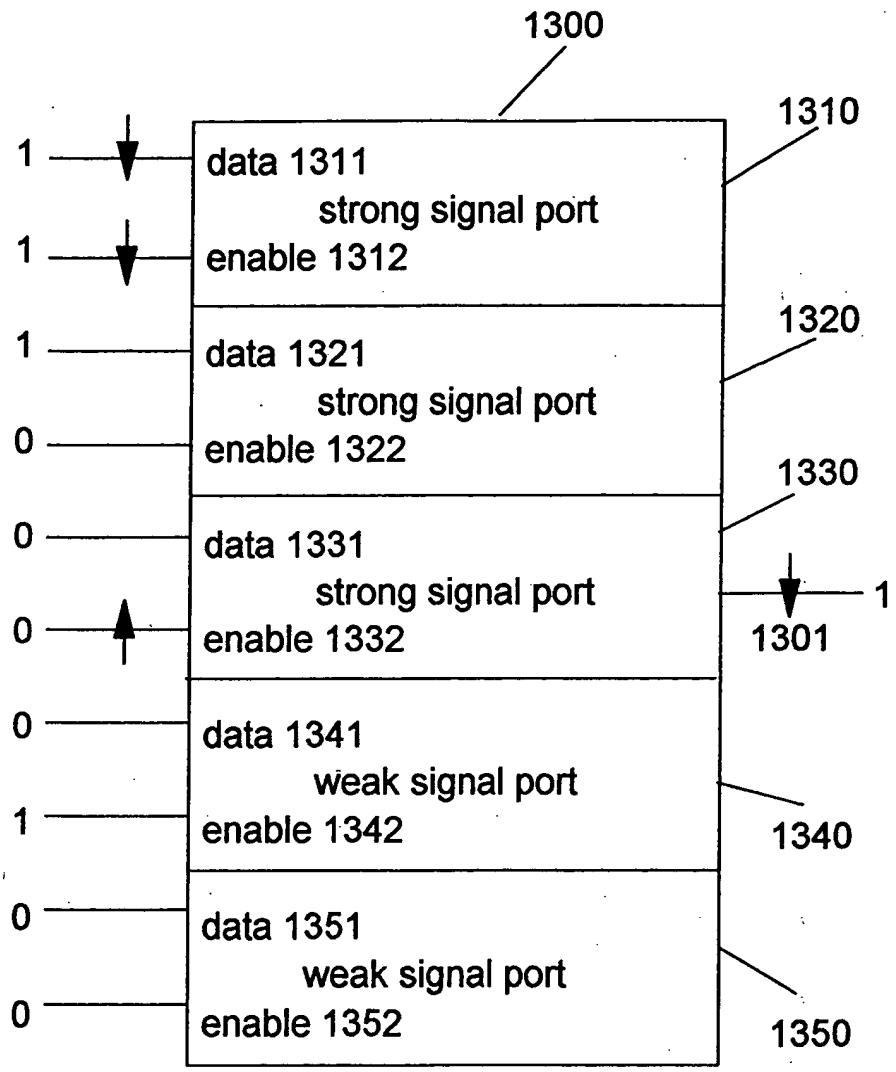


Figure 13.

0807654-0654404

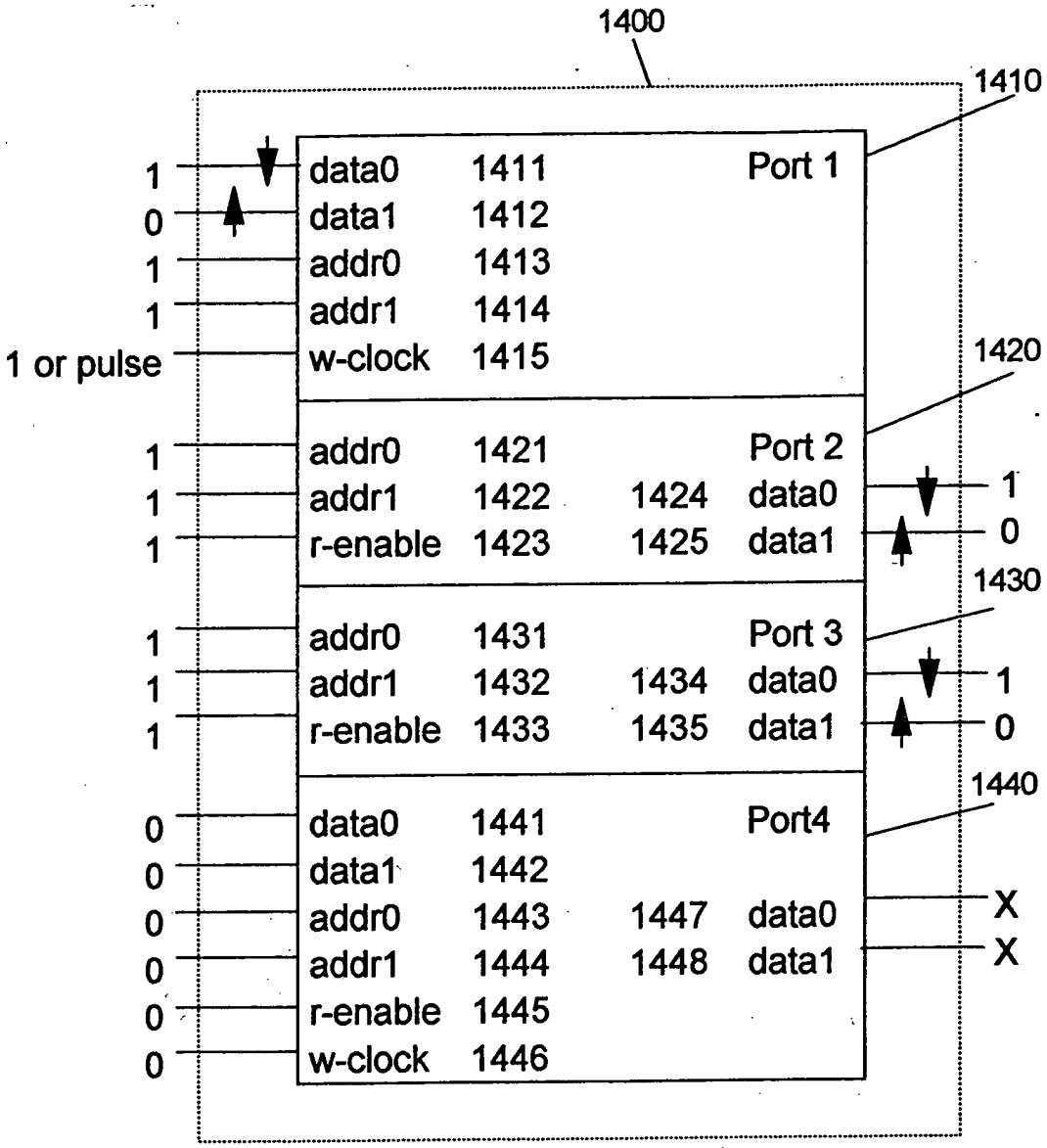

1400
1410
1
0
1
1
1 or pulse
data0 1411
data1 1412
addr0 1413
addr1 1414
w-clock 1415
Port 1
1420
1
1
1
addr0 1421
addr1 1422
r-enable 1423
1424 data0
1425 data1
Port 2
1
0
1430
1
1
1
addr0 1431
addr1 1432
r-enable 1433
1434 data0
1435 data1
Port 3
1
0
1440
0
0
0
0
0
0
data0 1441
data1 1442
addr0 1443
addr1 1444
r-enable 1445
w-clock 1446
Port4
1447 data0
1448 data1
X
X

Figure 14.

ROM CONTENT TABLE

addr0	addr1	bit0	bit1
0	0	0	0
0	1	0	1
1	0	1	0
1	1	1	1

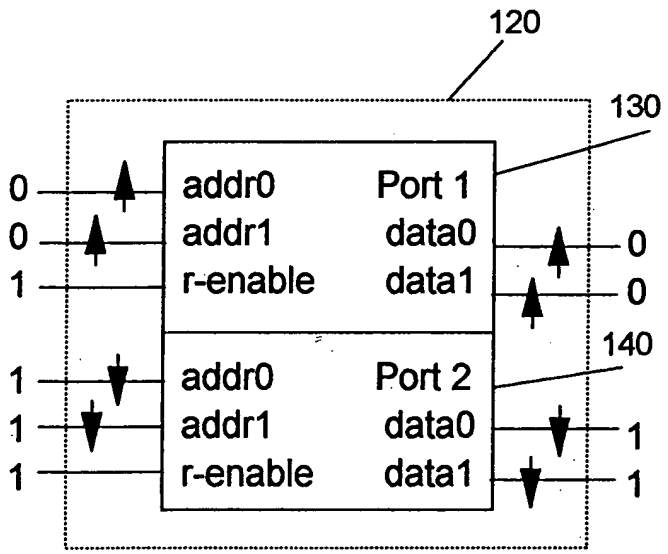


Figure 15.

09/978,554 - 06/14/04

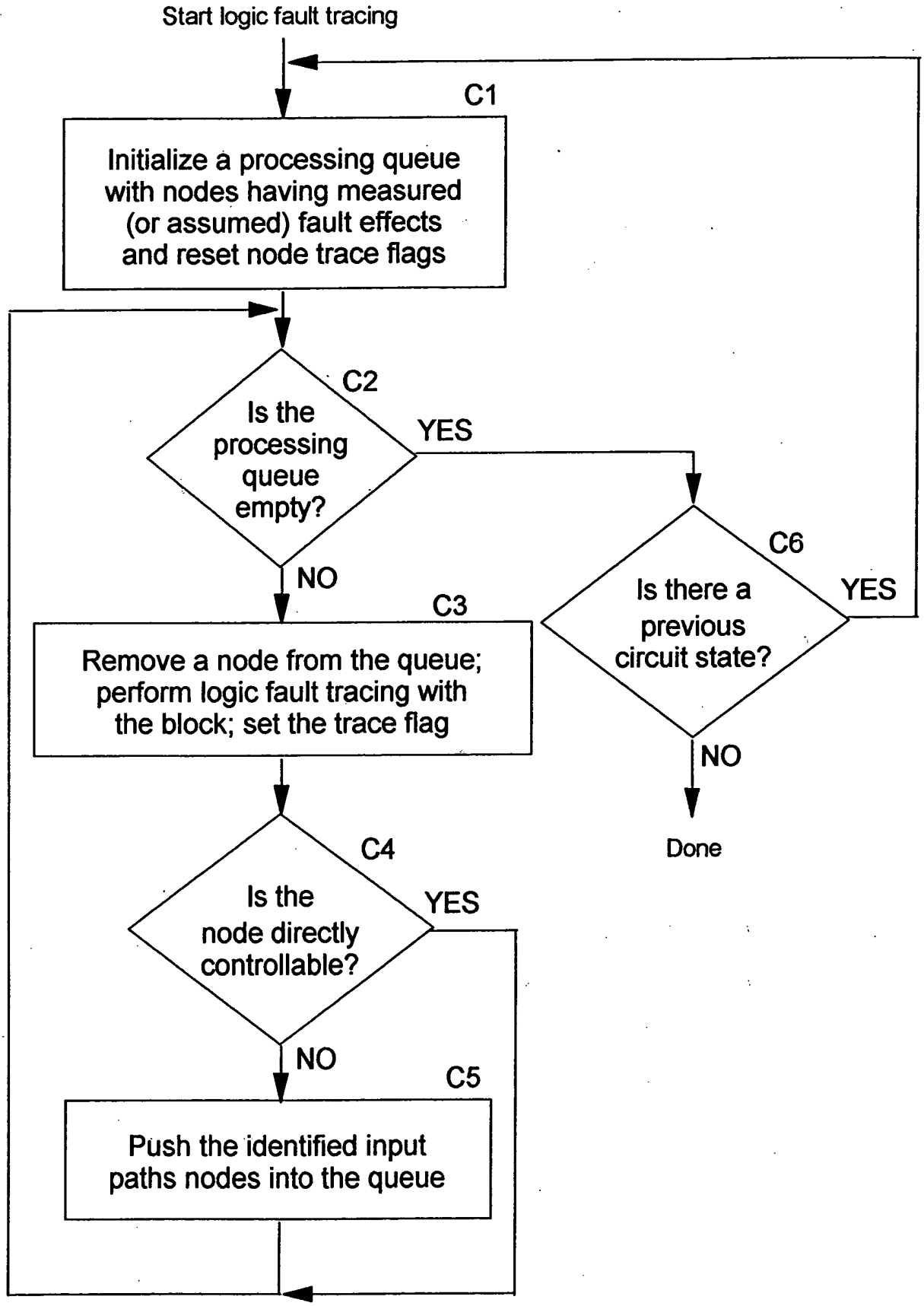

Start logic fault tracing
C1
Initialize a processing queue with nodes having measured (or assumed) fault effects and reset node trace flags
C2
Is the processing queue empty?
YES
NO
C3
Remove a node from the queue; perform logic fault tracing with the block; set the trace flag
C4
Is the node directly controllable?
YES
NO
C5
Push the identified input paths nodes into the queue
C6
Is there a previous circuit state?
YES
NO
Done

Figure 16.

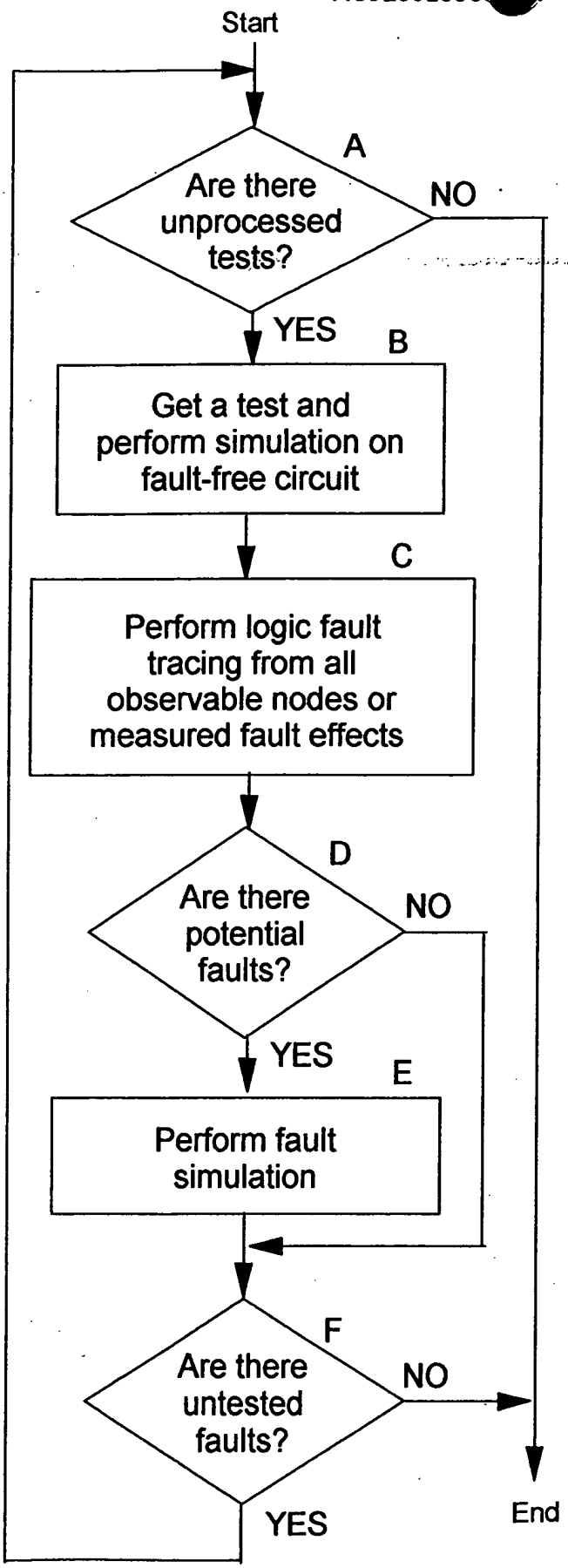


Figure 17.

09/896,554 - 06/28/01